

## **Genetic Markers as Instrumental Variables: An Application to Child Fat Mass and Academic Achievement**

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### **Abstract**

The use of genetic markers as instrumental variables (IV) is receiving increasing attention from economists. This paper examines the conditions that need to be met for genetic variants to be used as instruments. We combine the IV literature with that from genetic epidemiology, with an application to child adiposity (fat mass, determined by a dual-energy X-ray absorptiometry (DXA) scan) and academic performance. OLS results indicate that leaner children perform slightly better in school tests compared to their more adipose counterparts, but the IV findings show no evidence that fat mass affects academic outcomes.